

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A communication system for forwarding a multicast packet transmitted from a source terminal to a destination terminal in accordance with predetermined forwarding paths, wherein

the forwarding paths include a plurality of multicast-capable routers and a plurality of multicast-incapable routers,

the plurality of multicast-capable routers include a non-branch router and a branch router, the non-branch router is connected to a single other multicast-capable router on the destination terminal side, and the branch router is connected to a plurality of other multicast-capable routers including the non-branch router on the destination terminal side,

the non-branch router comprises:

a message provider configured to generate a request message requesting deletion of an address of the non-branch router and requesting registration of an address of a register target multicast-capable router connected to the destination terminal side of the non-branch router; and

a forwarder configured to forward the request message to the branch router connected to the destination terminal side of the non-branch router;

the branch router comprises:

a forwarding destination holder configured to hold a table in which each address of the plurality of other multicast-capable routers is registered;

a forwarding destination register configured to update the table by deletion of the address of the non-branch router from the table and registration of an address of the register target multicast-capable router to the table, in accordance with receiving of the request message; and

a forwarding controller configured to generate a second encapsulated multicast packet in accordance with receiving a first encapsulated multicast packet generated by setting an address of the branch router to the multicast packet, and wherein

the forwarding controller is configured to generate the second encapsulated multicast packet by re-setting an address registered in the updated table to the multicast packet derived from the first encapsulated multicast packet.

Claim 2 (Previously Presented): The communication system according to claim 1, wherein the source terminal registers an address of a branch router most located on the source terminal side.

Claim 3-4 (Canceled).

Claim 5 (Previously Presented): The communication system according to claim 1, wherein the plurality of multicast-capable routers further includes an edge router connecting to the destination terminal, and

the edge router holds a multicast group address added to a multicast group in which the source terminal forwards the multicast packet.

Claim 6 (Previously Presented): The communication system according to claim 5, wherein the edge router transmits the multicast packet to the destination terminal by multicast, based on the multicast group address included in the multicast packet as a destination address.

Claim 7 (Previously Presented): The communication system according to claim 1, wherein when each of the plurality of other multicast-capable routers is connected to same subnetwork, the forwarding destination register is configured to register a multicast group address to the table instead of the each address of the plurality of other multicast-capable routers, the multicast group address is added to a multicast group in which the source terminal forwards the multicast packet, and

when the multicast group address is registered in the table, the forwarding controller is configured to transmit the multicast packet derived from the first encapsulated multicast packet to each of the plurality of other multicast-capable routers by multicast.

Claim 8 (Currently Amended): The communication system according to claim 1, wherein

the plurality of multicast-capable routers further include an other branch router located between the source terminal and the branch router,

when a router connected to the source terminal is changed from the other branch router to the branch router by moving of the source terminal, the forwarding controller of the branch router is configured to receive a third encapsulated multicast packet generated by setting an address of the other branch router to the multicast packet and to ~~generated~~ generate fourth encapsulated multicast packets by re-setting an address registered in the updated table and the address of the other branch router to the multicast packet derived from the third encapsulated multicast packet.

Claim 9 (Previously Presented): The communication system according to claim 1, wherein

the source terminal includes an update notification section for providing a location update message which notifies a new source terminal address after a change to a destination terminal when a source terminal address is changed, and

the destination terminal includes a destination terminal message provider for providing a join request message to the new source terminal address based on the location update message, the join request message requests registration of an address of the destination terminal.

Claim 10 (Canceled).

Claim 11 (Previously Presented): A multicast-capable router used in a communications system for forwarding a multicast packet transmitted from a source terminal to a destination terminal in accordance with forwarding paths including a plurality of multicast-capable routers and a plurality of multicast-incapable routers, wherein

when the multicast-capable router is a non-branch router connected to a single other multicast-capable router on the destination terminal side, the multicast-capable router comprises:

a message provider configured to generate a request message requesting deletion of an address of the non-branch router and requesting registration of an address of a register target multicast-capable router connected to the destination terminal side of the non-branch router; and

a forwarder configured to forward the request message to the branch router connected to the destination terminal side of the non-branch router;

when the multicast-capable router is a branch router connected to a plurality of other multicast-capable routers including the non-branch router on the destination terminal side, the multicast-capable router comprises:

- a forwarding destination holder configured to hold a table in which each address of the plurality of other multicast-capable routers is registered;

- a forwarding destination register configured to update the table by deletion of the address of the non-branch router from the table and registration of an address of the register target multicast-capable router to the table, in accordance with receiving of the request message; and

- a forwarding controller configured to generate a second encapsulated multicast packet in accordance with receiving a first encapsulated multicast packet generated by setting an address of the branch router to the multicast packet, and wherein

- the forwarding controller is configured to generate the second encapsulated multicast packet by re-setting an address registered in the updated table to the multicast packet derived from the first encapsulated multicast packet.

Claim 12-16 (Canceled).

Claim 17 (Previously Presented): A communication method for forwarding a multicast packet transmitted from a source terminal to a destination terminal in accordance with forwarding paths including a plurality of multicast-capable routers and a plurality of multicast-incapable routers, the plurality of multicast-capable routers including a non-branch router and a branch router, wherein

- the non-branch router is connected to a single other multicast-capable router on the destination terminal side

and wherein the branch router is connected to a plurality of other multicast-capable routers, including the non-branch router, on the destination terminal side, the communication method comprising:

generating, in the non-branch router, a request message requesting deletion of an address of the non-branch router and requesting registration of an address of a register target multicast-capable router connected to the destination terminal side of the non-branch router;

forwarding the request message to the branch router connected to the destination terminal side of the non-branch router;

receiving, in the branch router, the request message;

updating, in branch router, a table, in which each address of the plurality of other multicast-capable routers is registered, by deletion of the address of the non-branch router from the table and by registration an address of the register target multicast-capable router to the table, in accordance with the received request message;

receiving, in the branch router, a first encapsulated multicast packet generated by setting an address of the branch router to the multicast packet;

generating, in the branch router, a second encapsulated multicast packet by re-setting an address registered in the updated table to the multicast packet derived from the first encapsulated multicast packet.

Claim 18 (Previously Presented): The communication method according to claim 17, wherein the source terminal registers an address of a branch router most located on the source terminal side.

Claim 19 (Canceled).

Claim 20 (Previously Presented): The communication method according to claim 17, comprising:

transmitting a location update message which notifies a destination terminal of a source terminal address after a change when a new source terminal address is changed; and
transmitting, to the new source terminal address, the join request message which requests registration of an address of the destination terminal, based on the location update message.

Claim 21 (Previously Presented): The communications system according to claim 1, wherein the register target multicast-capable router is an other branch router or an edge router,

the other branch router is connecting to a plurality of other multicast-capable routers on the destination terminal side, and

the edge router is connecting to the destination terminal.